

LR

50-413

50-414

June 2, 1994

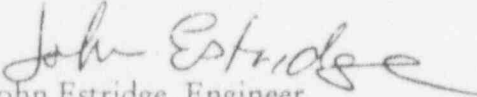
J.T. Harris
W.J. Davis
A.P. Jackson
S.D. Davenport
J.S. Velte

Subject: Catawba Nuclear Station -NPDES Permit No. SC0004278
Approval for Sodium Bromide Usage in RC Cooling Towers
File: CN-702.13

Attached please find the approval letter from DHEC authorizing the use of Sodium Bromide in the cooling towers. This letter is identical to the letter that Tim Eleazer faxed up for our review, with the exception that the reference to RL in condition #2 was corrected. Also, attached please find an internal DHEC memo from Vernon Beaty giving his report on his review of the toxicity data we supplied the State on Sodium Bromide.

Please note the special conditions contained in the memo. Environmental Management at the site should make the notification required in condition #4. Should you have any questions feel free to give me a call at (704) 875-5965.

Sincerely,


John Estridge, Engineer
Environmental Division, Water Protection

jte/323

Attachments

cc: M.A. Lascara
NRC Document Distribution List

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Promoting Health, Protecting the Environment

May 25, 1994

ENVIRONMENTAL PROTECTION SECTION

Mr. John S. Carter
Technical System Manager
Duke Power Company
Environmental Division, Water Protection
13339 Hagers Ferry Road
Huntersville, N.C. 28078-7929

MAY 31 1994
 FILE CN-702113
 TICKLER DATE _____
 COPY _____
 ROUTE JTE

Re: Sodium Bromide Trial
Catawba Nuclear Station/Duke Power Co.
York County

Dear Mr. Carter:

Our Office has received your April 20, 1994 letter requesting approval to conduct a maintenance chemical trial using sodium bromide for control of biological growth in the two (2) recirculating cooling towers systems at the Catawba Nuclear Station in York County. We understand this trial is to evaluate the effectiveness of the sodium bromide in comparison to the sodium hypochlorite which is presently used in the cooling towers. Based on a review of the information provided, our Office approves your request with the following conditions:

- 1) This trial is approved for a period of ninety (90) days.
- 2) A minimum dilution of one (1) part RC cooling tower blowdown water to two (2) parts once through RL cooling water (1:2) must be maintained.
- 3) During the trial, internal Outfall 005 shall be limited to a monthly average of 0.2 mg/l and a instantaneous maximum of 0.5 mg/l for Free Available Oxidants.
- 4) In regards to the specific start date of the trial, please contact Mr. Al Williams in our District Office at (803)285-7461.
- 5) Before sodium bromide can be used permanently as a maintenance chemical in the cooling towers, the Catawba Nuclear Station NPDES Permit No. SC0004278 will have to be modified to add Free Available Oxidant (FAO) to the permit.

Duke Power Co./April 20, 1994 letter
Page 2

If you should have any questions, please call me at (803)734-5247.

Sincerely,

Timothy M. Eleazer

Timothy M. Eleazer
Environmental Engineer Associate
Industrial and Agricultural
Wastewater Division

TME/ebs

cc: Al Williams, Catawba EQC
Vernon Beaty, WQ Monitoring Section



MEMORANDUM

TO: Tim Eleazer
Federal/Energy/Pretreatment Section

FROM: Vernon Beaty, Aquatic Toxicologist
Water Quality Monitoring Section *Vernon Beaty*

SUBJECT: DUKE POWER/CATAWBA NUCLEAR STA
NPDES No. SC0004278
York Co.

DATE: May 19, 1994

I have reviewed the toxicity data on the sodium hypochlorite/sodium bromide solution to be used in the RC cooling towers. No EC₂₀ was generated because there was no toxic response to the solution at cooling tower water concentrations less than or equal to 33.4%, or 1:2 dilution. Since the dilution will be 1:8, use of this solution is not expected to cause any toxicity to the receiving stream. I suggest that the minimum dilution be limited to 1 part cooling waste to 2 parts intake water if there is any possibility that the dilution will fall below 1:8. If you have any questions, call me at 734-5396.

RECEIVED

MAY 23 1994

S. C. Dept. of Health & Environmental
Control - Industrial - Agricultural
Wastewater Division